# FIG. 1A

MetSer PheLeuGlylle LeuCysLys CysProLeu GlnAsnGluSer GlnGluGlu SerTyrAsn AlaTyrProLeu ArgProSerPhe ArgAsnLeu AspPheSer LysGlyHisGln GlyIleThr GlyAspLys GluGlyGlnGln ArgArgIle ArgGlnGln ArgLeuIleSer LeuProAlaVal LysValSer MetAspTrpLeu ArgLeuArg ProArgVal PheGlnGluAla ValValAsp GluArgGln TyrIleTrpPro TrpLeuIle SerileglyLys TrpileAla AspAsnGlnPro ArgLeulle GlnCysGlu AsnGluValGly LysLeuLeu PhelleThr GluIleProGlu LeuIleLeu TGGACTCAIT CTCGAACCTT TTCAACTCGG GAGAAGCTCT CTTTAACCTT CTTGTCAAAT TCTCCGACGA TAAGGTTTT CGAAAGTTGA GAGTCGTCAA AGTICAIGIC AITGICAITA ACCIGITICA ACTICAICAC CITCGIGACI ITAGCAAIGA AACCGAGCAG CACACITATA GCCAAGATGA GCAGCIAIGI TCAAGIACAG IAACAGIAAI IGGACAAAGI IGAAGIAGIG GAAGCACIGA AAICGITACI IIGGCICGIC GIGIGAAIAI CGGIICIACI CGICGATACA ACCIGIGICA ACGACCGGGA GAAATACAGA AAAGAACCGI AGGACACGII CACAGGAGAI GICTIACICA GAGICCICCI CAGGAIGIIA CGGAIAGGAG TICCAGCAGI CAAGGICICC AIGGACIGGC TAAGACICAG ACCCAGGGIC ITICAGGAGG CAGIGGIGGA IGAAAGACAG TACAITIGGC CCIGGIIGAI AAGGTCGTCA GITCCAGAGG TACCIGACCG ATICIGAGIC IGGGICCCAG AAAGICCICC GICACCACT ACTITCIGIC AIGIAAACCG GGACCAACIA IleSerLeuLeu AsnSerPheHis ProHisGlu GluAspLeu SerSerIleSer AlaThrPro LeuProGlu GluPheGluLeu GlnGlyPhe LeuAlaLeu ITCICITCIG AAIAGITICC AICCCCAIGA AGAGGACCIC ICAAGIAITA GIGCGACACC ACITCCAGAG GAGITIGAAI IACAAGGAIT ITIGGCAIIG AAGAGAAGAC ITATCAAAGG TAGGGGTACT TCTCCTGGAG AGTTCATAAT CACGCTGTGG TGAAGGTCTC CTCAAACTTA ATGTTCCTAA AAACGGTAAC AGACCTICIT TCAGGAACIT GGAITITICC AAAGGICACC AGGGIAITIAC AGGGGACAAA GAAGGCCAGC AACGACGAAI ACGACAGAA CGCTTGAICT TCTGGAAGAA AGTCCTTGAA CCTAAAAAGG TTTCCAGTGG TCCCATAATG TCCCCTGTTT CTTCCGGTCG TTGCTGCTTA TGCTGTCGTT GCGAACTAGA CTATAGGCAA ATGGATTGCT GATAATCAGC CAAGGCTGAT TCAGTGTGAA AATGAGGTAG GGAAATTGTT GTTTATCACA GAAATCCCAG AATTAATACT BATATCCGIT TACCTAACGA CTAITAGICG GITCCGACIA AGICACACIT TIACICCAIC CCITIAACAA CAAATAGIGI CTITAGGGIC TTAAITAIGA LeuGluAspPro SerGluAlaLys GluAsnLeu IleLeuGln GluThrSerVal IleGluSer LeuAlaAla AspGlySerPro GlyLeuLys SerValLeu GGAAGACCCC AGTGAAGCCA AAGAGAACCT CATTCTGCAA GAAACATCTG TGATAGAGTC GCTGGCTGCA GATGGGAGCC CAGGGCTAAA ATCAGTGCTA CCTICTGGGG ICACTICGGI IICICITIGGA GTAAGACGII CITIGIAGAC ACIAICICAG CGACCGACGI CTACCCICGG GICCCGAITT TAGICACGAI CTCAGCAGTT TGGACACAGT TGCTGGCCCT CITTATGTCT ITTCTTGGCA TCCTGTGCAA GTGTCCTCTA CAGAATGAGT CTCAGGAGGA GTCCTACAAT GCCTATCCTC GCTTTCAACT ACCTGAGTAA GAGCTTGGAA AAGTTGAGCC CTCTTCGAGA GAAATTGGAA GAACAGTTTA AGAGGCTGCT ATTCCAAAAA รบธิรา เาบา รู้ รู้ หยะ หาย รู้ RUL 26) 4 701 ٣ 601 ~

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### FIG. 1E

တိ	SerThrSerArg AsnLeuSer AsnAsnCys AspThrGlyGlu LysProVal ValThrPhe LysGluAsnIle LysThrArg GluValAsn ArgAspGlnGly
HK	TCTACAAGCC GAAATTTAAG CAACAACTGT GACACAGGAG AGAAGCCAGT GGTTACCTTC AAAGAAAACA TTAAGACACG AGAAGTGAAC AGAGACCAAG AGAIGTTCGG CTTTAAATTC GTTGTTGACA CTGTGTCCTC TCTTCGGTCA CCAAIGGAAG TTTCTTTTGT AAITTCTGTGC TCTTCACTTG TCTCTGGTTC
Ö	GlyArgSerPhe ProProLys GluValArgArg AspTyrSer LysGlyIle ThrValThrLys AsnAspGly LysLysAsp AsnAsnLysArg LysThrGlu
	GAAGAAGTIT TCCTCCCAAA GAGGTGAGAA GGGACTATAG CAAAGGAATA ACTGTAACTA AGAATGATGG AAAGAAGGAC AACAAGA GGAAAACTGA CTTCTTCAAA AGGAGGGTIT CTCCACTCTT CCCTGATATC GTTTCCTTAT TGACATTGAT TCTTACTACC TTTCTTCCTG TTGTTGTTCT CCTTTTGACT
댔	T +3 GluThrLysLys CysThrLeuGlu LysLeuGln GluThrGly LysGlnAsnVal AlaValGln ValLysSer GlnThrGluLeu ArgLysThr ProValSer
	AACCAAGAAA TGCACCTTAG AAAAGTTACA GGAAACAGGA AAGCAGAATG TGGCAGTGCA GGTAAAATCC CAGACAGAAC TAAGAAAGAC TCCAGTGTCT TTGGTTCTTT ACGTGGAATC TTTTCAATGT CCTTTGTCCT TTCGTCTTAC ACCGTCACGT CCATTTTAGG GTCTGTCTTG ATTCTTTCTG AGGTCACAGA
	GludladrgLys ThrProVal ThrGlnThr ProThrGlnAla SerAsnSer GlnPheIle ProIleHisHis ProGlyAla PheProPro LeuProSerArg
	GAGGCCAGAA AAACACCTGT AACTCAAACC CCAACTCAAG CAAGTAACTC CCAGTTCATC CCCATTCATC ACCCTGGAGC CTTCCCTCCT CTTCCCAGCA CTTCGGTCTT TTTGTGGACA TTGAGTTTGG GGTTGAGTTC GTTCATTGAG GGGTCAAGTAG GGGTAAGTAG TGGGACCTCG GAAGGGAGGA GAAGGGTCGT
~	ArgProGlyPhe ProProPro ThrTyrVallle ProProPro ValAlaPhe SerMetGlySer GlyTyrThr PheProAla GlyValSerVal ProGlyThr
	GECCAGGETT TCCGCCCCCA ACATATGTTA TCCCCCCGCC TGTGGCATTT TCTATGGGCT CAGGTTACAC CTTCCCAGCT GGTGTTTCTG TCCCAGGAAC CCGGTCCCAA AGGCGGGGGGT TGTATACAAT AGGGGGGGCGG ACACCGTAAA AGATACCCGA GTCCAATGTG GAAGGGTCGA CCACAAAGAC AGGGTCCTTG
72	+3 ThrPheLeuGln ProThrAlaHis SerProAla GlyAsnGln ValGlnAlaGly LysGlnSer HisIlePro TyrSerGlnGln ArgProSer GlyProGly
	CTITCTICAG CCTACAGCTC ACTOTOCAGO AGGAAACCAG GTGCAAGCTG GGAAACAGTO CCACATTOCT TACAGCCAGO AACGGCOOTO TGGACCAGG GAAAGAAGTO GGATGTOGAG TGAGAGGTOG TCCTTTGGTC CACGTTOGAC CCTTTGTCAG GGTGTAAGGA ATGTOGGTOG TTGCOGGGAG ACCTGGTOCO
	ProMetAsnGln GlyProGln GlnSerGln ProProSerGln GlnProLeu ThrSerLeu ProAlaGlnPro ThrAlaGln SerThrSer GlnLeuGlnVal
	CCAATGAACC AGGGACCTCA ACAATCACAG CCACCTTCC AGCAACCCCT TACATCTTTA CCAGCTCAGC CAACAGCACA GTCTACAAGC CAGCTGCAGG GGTTACTTGG TCCCTGGAGT TGTTAGTGTC GGTGGAAGGG TCGTTGGGGA ATGTAGAAAT GGTCGAGTCG GTTGTCGTGT CAGATGTTCG GTCGACGTCC

# FIG. 10

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r GlnGlnAl	ATCAACAGGC TAGTTGTCCG	GlnAspPro	CAGCCCIACT ACCTTCAGAC CCAAGACCCC GTCGGGATGA TGGAAGTCTG GGTTCTGGGG	AsnHisAsnP	GGAGCCATAT AACCATAATC CCTCGGTATA TTGGTATTAG	p ArgArgGl	GCAAACATAG ACCGCAGGGG CGTTTGTATC TGGCGTCCCC	MetSerHis	CATGTCACAT GTACAGTGTA	LeuThrSerS	TGGGAAAAC CTGACATCCA ACCCTTTTTG GACTGTAGGT	ProSerbeuPro AlaSerSer	CTGCCAGTTC
heGlnGlnTy	TCCAGCAGT	LeuGlnThr	CCTTCAGAC	GluProTyr	GAGCCATAT	laAsnIleAs	CAAACATAG	SerGluLeu	CTCAGAGCT	GlyLysAsn	GGGAAAAC	roserLeuPr	CATCACTTC
lisSerGly F	ACTCTGGA 1	InProTyrTyr	AGCCCTACT A	PheproMet	TTTCCCAT G	laGlnGln #	SCACAGCAA C	euGluĽysPro	rggagaage c	GluValTyr	ATGAGGTATA 1 TACTCCATAT 7		CCGTGGTCT C
InserPro ThrLysAla ValProAla LeuGlyLysSer ProProHis HisSerGly PheGlnGlnTyr GlnGlnAla	TTCAAGCTCT AACTCAGCAA CAACAATCCC CTACAAAGC TGTGCCGGCT TTGGGGAAAA GCCCGCCTCA CCACTCTGGA TTCCAGCAGT ATCAACAGGC AAGTTCGAGA TTGAGTCGTT GTTGTTAGGG GATGTTTTCG ACACGGCCGA AACCCCTTTT CGGGCGGAGT GGTGAGACCT AAGGTCGTCA TAGTTGTCCG	U) C+3 AlaAspAlaSer LysGlnLeuTrp AsnProPro GlnValGln GlyProLeuGly LysIleMet ProValLys GlnProTyrTyr LeuGlnThr GlnAspPro T	GGICCAITAG GGAAAAITAI GCCIGIGAAA CAGCCCIACI ACCIICAGAC CCAAGACCCC CCAGGIAAIC CCIITIAAIA CGGACACIII GICGGGAIGA IGGAAGICIG GGIICIGGGG	LysMetLysPro PheProMet GluProTyr AsnHisAsnPro	AAAATGAAGC CTTTTCCCAT GGAGCCATAT AACCATAATC TTTTACTTCG GAAAAGGGTA CCTCGGTATA TTGGTATTAG	ProserGluVal LysValPro GluPheTyrTrp AspSerSer TyrSerMet AlaAspAsnArg SerValMet AlaGlnGln AlaAsnIleAsp ArgArgGly	GCTGATAACA GATCTGTAAT GGCACAGCAA GCAAACATAG ACCGCAGGGG CGACTATTGT CTAGACATTA CCGTGTCGTT CGTTTGTATC TGGCGTCCCC	GlyLysArgSer ProGlyValPhe ArgProGlu GlnAspPro ValProArgMet ProPheGlu LysSerLeu LeuGluLysPro SerGluLeu MetSerHis	GTACCCAGAA TGCCGTTTGA GAAATCCTTA TTGGAGAAGC CCTCAGAGCT CATGTCACAT CATGGGTCTT ACGGCAAACT CTTTAGGAAT AACCTCTTCG GGAGTCTCGA GTACAGTGTA	SerSerSerPhe LeuSerLeu ThrGlyPhe SerLeuAsnGln GluArgTyr ProAsnAsn SerMetPheAsn GluValTyr GlyLysAsn LeuThrSerSer	TCTCTCAATC AGGAAAGATA CCCAAATAAT AGTATGTTCA ATGAGGTATA TGGGAAAAAC CTGACATCCA AGAGAGTTAG TCCTTTCTAT GGGTTTATTA TCATACAAGT TACTCCATAT ACCCTTTTTG GACTGTAGGT	SerSerLysAla GluLeuSer ProSerMetAla ProGlnGlu ThrSerLeu TyrSerLeuPhe GluGlyThr ProTrpSer	GCTCCAAAGC AGAACTCAGT CCCTCAATGG CCCCCCAGGA AACATCTCTG TATTCCCTTT TTGAAGGGAC TCCGTGGTCT CCATCACTTC CTGCCAGTTC CGAGGTTTCG TCTTGAGTCA GGGAGTTACC GGGGGGTCCT TTGTAGAGAC ATAAGGGAAA AACTTCCCTG AGGCACCAGA GGTAGTGAAG GACGGTCAAG
ıGlyLysSer	GGGAAAA GC	LysileMet P	AAAATTAT GC ITTTAATA CG	euGluLys Ly		aAspAsnArg	GCTGATAACA GA CGACTATTGT CI	ProPheGlu I	CCGTTTGA GA	roAsnAsn Se	CCCAAATAAT AGTATGTTCA GGGTTTATTA TCATACAAGT	rSerrenPhe	TTCCCTTT TT
lProAla Leu	GCCGGCT TTC	ProLeuGly 1	GGTCCATTAG GGAAAATTAT CCAGGTAATC CCTTTTAATA	IleLysLeuPhe GluProSer LeuGlnPro ProvalMetGln GlnGlnPro LeuGluLys	ATAAAACTGT TTGAGCCGTC ATTGCAACCT CCTGTAATGC AGCAGCAGCC TCTAGAAAA TATTTTGACA AACTCGGCAG TAACGTTGGA GGACATTACG TCGTCGTCGG AGATCTTTTT	rSerMet Ala		ProArgMet 1	GTACCCAGAA TGCCGTTTGA CATGGGTCTT ACGGCAAACT	luArgTyr P	AAAGATA CCO	rSerLeu Ty	ATCTCTG TAY
rLysAla Va	PARAGC TGT	WalGln Gly		alMetGln G	TAATGC AGC	pSerser Ty	CCTCAGAAGT CAAGGTCCCA GAATTCTACT GGGATTCTTC CTACAGCATG GGAGTCTTCA GTTCCAGGGT CTTAAGATGA CCCTAAGAAG GAIGTCGTAC	AspPro Val	GCAGGATCCT GTA	euAsnGln G	TCTCTCAATC AGGAAAGATA AGAGAGTTAG TCCTTTCTAT	oGlnGlu Th	CCAGGA AAC
nSerPro Th	ATCCC CTAC TAGGG GATG	ProPro Gln	AGATGCCTCC AAACAGCTGT GGAATCCCCC TCAGGTTCAA TCTACGGAGG TTTGTCGACA CCTTAGGGGG AGTCCAAGTT	InPro Prov	PACCT CCTG	eTyrTrp As	CTACT GGG	ProGlu Glr		lyPhe Serl	SGATIC ICIC	erMetAla Pr	PATGG CCCC
nGln GlnGl	GCAA CAACA CGTT GTTGI	LeuTrp Asn	CTGT GGAAT GACA CCTTA	roser LeuG	CGTC ATTGC	lPro GluPh	CCCA GAATT GGGT CTTAA	ValPhe Arç	GTCT TCCGI	erLeu Thro	CCCT CACC	uSer ProSe	CAGT CCCTC
ValGlnAlaLeu ThrGlnGln GlnG	TTCAAGCTCT AACTCAGCAA CAACAATCCC AAGTTCGAGA TTGAGTCGTT GTTGTTAGGG	Ser LysGln	AGATGCCTCC AACAGCTGT GGAATCCCCC TCTACGGAGG TTTGTCGACA CCTTAGGGGG	euPhe GluP	ATAAAACTGT TTGAGCCGTC ATTGCAACCT TATTTTGACA AACTCGGCAG TAACGTTGGA	uVal LysVa	CCTCAGAAGT CAAGGTCCCA GAATTCTACT GGAGTCTTCA GTTCCAGGGT CTTAAGATGA	Ser ProGly	CAAACGGTCA CCAGGAGTCT TCCGTCCAGA GTTTGCCAGT GGTCCTCAGA AGGCAGGTCT	erPhe LeuS	TCATCCTCTT TCCTGTCCCT CACCGGATTC AGTAGGAGAA AGGACAGGGA GTGGCCTAAG	sAla GluLe	GCTCCAAAGC AGAACTCAGT CGAGGTTTCG TCTTGAGTCA
ValGlnAl	TTCAAGC	AlaAspAla		IleLysLe	ATAAAAC					SerSerS			
+3	1501	SŪE	នទឹក <u>្</u> រ	τὖ⁻	ΓΕ̈́SΙ	٦Ę̈́E	를 (F	₹Ṻ́L	E 26)	) T	2001	+3	2101

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ProPheSer	AGATCATICA ACACCAGCCA GCCAGICTCC ICATICCICI AACCCAAGCA GCCTACCCAG CICTCCICCA ACACACAAAC ATAAITCIGI TCCATICTCC ICTAGIAAGI IGIGGICGGI CGGICAGAGG AGTAAGGAGA TIGGGIICGI CGGATGGGIC GAGAGGAGGI TGIGIGITGG IATIAAGACA AGGIAAGAGG	AsnPheGlyPro IleGlyThr ProAspAsn ArgAspArg ThrAlaAsp ArgTrpLys ThrAspLysPro AlaMetGly GlyPheGly IleAspTyrLeu	AATTTTGGAC CCATTGGGAC TCCAGATAAC AGGGATAGAA GGACTGCAGA TCGGTGGAAA ACTGATAAGC CAGCCATGGG TGGGTTTGGC ATTGATTATC TTAAAACCTG GGTAACCCTG AGGTCTATTG TCCCTATCTT CCTGACGTCT AGCCACCTTT TGACTATTCG GTCGGTACCC ACCCAAACCG TAACTAATAG	LeuSerAlaThr SerSerSer GluSerSerTrp HisGlnAla SerThrPro SerGlyThrTrp ThrGlyHis GlyProSer MetGluAspSer SerAlaVal	TCTCAGCAAC GTCATCCTCT GAGAGCAGTT GGCATCAGGC CAGCACTCCG AGTGGCACCT GGACAGGCCA TGGCCCTTCC ATGGAGGATT CCTCTGCTGT AGAGTCGTTG CAGTAGGAGA CTCTCGTCAA CCGTAGTCCG GTCGTGAGGC TCACCGTGGA CCTGTCCGGT ACCGGGAAGG TACCTCCTAA GGAGACGACA	IleTrpSer SerSerMet MetHisProGly ProSerAla LeuGluGln LeuLeuMetGln GlnLysGln LysGlnGln	CCTCATGGAA AGCCTAAAGT CTATCTGGTC CAGTTCCATG ATGCATCCTG GACCTTCTGC TCTGGAGCAG CTGTTAATGC AGCAGAAGCA GAAACAGCAA GGAGTACCTT TCGGATTTCA GATAGACCAG GTCAAGGTAC TACGTAGGAC CTGGAAGACG AGACCTCGTC GACAATTACG TCGTCTTCGT CTTTGTCGTT		CGGGGACAAG GCACCATGAA CCCTCCACAC TGAGGCCAAA GTGGCAACCT GGGAATGAAG GCTCCATAAA CCATGGCATG TTGGGTTTGC AGGACTGGCC GCCCCTGTTC CGTGGTACTT GGGAGGTGTG ACTCCGGTTT CACCGTTGGA CCCTTACTTC CGAGGTATT GGTACCGTAC AACCCAAACG TCCTGACGG	GTGTGCACGA AATGTTCGCA	CACACGIGCI TIACAAGCGI TATCTCACTC AGTTACTTGG	CTCTCTCTCC TTGACGACAA ATAGAGTGAG TCAATGAACC
1 Pro	TCC	. 11e	ATTC	er Se	CCT	n Ly	GAA		AGG!	AATC	AGE	TCA
Serva	TCTGT	heGly	TTGGC	uAspS	GGATT	LysG]	AAGCA		TTTGC	CACG	CACTC	GTGAG
s Asn	ATAAT TATTA	GlyP	TGGGT	MetGl	ATGGA	n Gln	AGCAG		TTGGGTTTGC	GTGTG	CACACGIGCI	ataga
AsnHi	AACC	etGly	TGGG	oSer	TTCC	MetGl	ATGC		CATG	CTGA	GACT	ACAA
GlnSerPro HisSerSer AsnProSerSer LeuProSer SerProPro ThrHisAsnHis AsnSerVal	CACAC	AlaM	AGCCA	GlyPr	99900 00000	euLeu	TGTTA		CCATGGCATG	AGCCCGCTGA	CATAAGGIGG TCGGGCGACT GAGAGAGAGG AACTGCTGTT	TGACG
Pro I	CCA A GGT T	ysPro	AGC C	yHis	CCA T	Gln L	CAG C		AAA C		TGG T AGG A	TCC
erPro	CTCCT	rAspl	TGATA	ThrGl	ACAGG	euGlu	TGGAG		GCTCCATAAA CGAGGTATTT	GTATTCCACC	CATAAGGTGG GAGAGAGAGG	CTCTC
Ser S	AG CT	ys Th	AA AC	rTrp		Ala L	GC TC		AG GC TC CG			
euPro	TACCC	gTrpL	GTGGA	GlyTh	GGCAC	roSer	CTTCT		GGGAATGAAG	GAGGCTGTAA	AGCGACAGTT CTCCCACATT CCCGGGGCCT TCCGGAGGGA	GGGCCCCGGA AGGCCTCCCT
Ser L	7 GGG	sp Ar	A TCG	o Ser	G AGT	Gly P	G GAC		T GGG		1 CEC	A AGG
roser	CAAGC	rAlaA	TGCAG	ThrPr	ACTCO TGAGG	isPro	ATCCT		GTGGCAACCT CACCGTTGGA	TCGCTGTCAA	AGCGACAGIT CCCGGGGGCCT	55000
AsnP	AACC	rg Th	GGAC	a Ser	CAGC	MetH	ATGC		GTGG			
erSer	CCTCT	pArga	TAGAA	Jual	CAGGC	erMet	CCATG		CCAAA	STTTC	STCCC	CAGGG
Hiss	CATT	Argās	AGGGA	o His	GCCAT	SerS	CAGIT	* 1	TGAGGCCAAA	TITCIGITIC	AAAGACAAAG TCTCCGTCCC	AGAGGCAGGG
erPro	PAGG	Asn	FAAC ATTG	serTrj	CAA	rpSer	GAG (	жів	ACAC '		HGA :	TTG
GlnS	CCAGT(	ProAsı	CCAGA	luSeri	AGAGC			ProPr	CCTCC	CAGCC	ATCAGO ATCAGO	GIAGICCITG
aSer	25 E	Thr 1	T DE	er G	GA C	ßer	្ត ភូមិ ភូមិ	Asn I	A H	TG GC		.ag gr
ProA]	CCAG	legl)	TTGGC	rSer	ATCCI	Leuly	CTAA	hrMet	CCATO	GCAGO	CGTCC	TTCTTTTTAG TCTCACC AGAGTGG
r Thr	A ACA	Pro I	20 b	hr Se	C GTC	u Sex	A AGO T TCG	Gly T	ရ (၁၁) (၁၅)	CCT	G GGA	TTC C TCT G AGA
Hisse	AGATCATICA ACACCAGCCA GCCAGICTCC ICAIICCICI AACCCAAGCA GCCIACCCAG ICTAGIAAGI IGIGGICGGI CGGICAGAGG AGIAAGGAGA IIGGGIICGI CGGAIGGGIC	heGly	TTGGA	rAlaT	AGCAA	MetGl	CCTCATGGAA AGCCTAAAGT CTI GGAGTACCTT TCGGATTTCA GA	ArgGlyGlnGly ThrMetAsn ProProHis ***	CGGGGACAAG GCACCATGAA CCCTCCACAC GCCCCTGTTC CGTGGTACTT GGGAGGTGTG	CACACAGTCC CCTGCAGGTG GCAGCCCTCT	GIGIGICAGG GGACGICCAC CGICGGGAGA GIGCAACAAA AAGAAAAAIC CAICAGGAAC	CACGITGITT ITCITIT TAICACCGCC ICICACC AIAGIGGCGG AGAGIGG
+3 SerAspHisSer ThrProAlaSer	AGAT	AsnP	AATT	Leuse	TCTC	alLeu	CCTC	Argg	9999	5	GTGT	CACG TATC ATAG
+3 6	2201	ç SÜE	ร รู๊ราา	Ţ ŢŪŢ	rë si	L П+3 ValLeuMetGlu SerLeuLysSer П	길 (F	เป็น	E 2	83	2801	2901

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## FIG. 24

4	IGGACICATI CICGAACCIT ITCAACICGG GAGAAGCICT CITTAACCIT CITGICAAAT ICICCGACGA TAAGGITITI CGAAAGITIGA GAGICGICAA	
101	ATTGECATTA ACCEGETTECA ACTICATCAC CITCGEGACT ITAGCAATGA AACCGAGCAG CACACTTATA GCCAAGAEGA	
۰ و	tcaagtacag taacagtaat tggacaaagt tgaagtagtg gaagcactga aatcgttact itggctcgtc gtgtgaatat cggttctact cgtcgataca	
ı ÎE	MetSer PheLeuGlyIle LeuCysLys CysProLeu GlnAsnGluSer GlnGluGlu SerTyrAsn AlaTyrProLeu	2
g gTI-	TGGACACAGT TGCTGGCCCT CTTTATGTCT TTTCTTGGCA TCCTGTGCAA GTGTCCTCTA CAGAATGAGT CTCAGGAGGA GTCCTACAAT GCCTATCCTC ACCTGTGTCA ACGACCGGGA GAAATACAGA AAAGAACCGT AGGACACGTT CACAGGAGAT GTCTTACTCA GAGTCCTCCT CAGGATGTTA CGGATAGGAG	
רויי	LeuProAlaVal LysValSer MetAspTrpLeu ArgLeuArg ProArgVal PheGlnGluAla ValValAsp GluArgGln TyrIleTrpPro TrpLeuIle	øı
10 10 10 10 10 10 10 10 10 10 10 10 10	TICCAGCAGI CAAGGICICC AIGGACTGGC TAAGACTCAG ACCCAGGGIC TITCAGGAGG CAGIGGIGGA TGAAAGACAG TACATITGGC CCTGGITGAT AAGGICGICA GIICCAGAGG TACCIGACCG AITCIGAGIC TGGGICCCAG AAAGICCICC GICACCACCT ACTITCTGIC AIGIAAACCG GGACCAACTA	
	Ile	
-F	TICICITICIG ANTAGITICC AICCCCAIGA AGAGGACCIC ICAAGIAITA GIGCGACACC ACTICCAGAG GAGITIGAAI TACAAGGAIT ITIGGCAFIG AAGAGAAGAC ITAICAAAGG IAGGGGIACI ICICCIGGAG AGIICAIAAI CACGCIGIGG IGAAGGICIC CICAAACITA AIGTICCIAA AAACCGIAAAC	
. ლ 1 II	ArgProSerPhe ArgAsnLeu AspPheSer LysGlyHisGln GlyIleThr GlyAspLys GluGlyGlnGln ArgArgIle ArgGlnGln ArgLeuIleSer	8
ದ್ದ 1	AGACCTICIT TCAGGAACTI GGATTITICC AAAGGICACC AGGGIATIAC AGGGGACAAA GAAGGCCAGC AACGACGAAI ACGACAGCAA CGCTTGAICT TCTGGAAGAA AGICCTIGAA CCTAAAAAGG TITCCAGIGG TCCCAIAAIG ICCCCIGITI CITCCGGICG IIGCIGCITA IGCIGICGII GCGAACTAGA	
۳	SerileGlyLys TrpileAla AspAsnGlnPro ArgLeulle GlnCysGlu AsnGluValGly LysLeuLeu PhelleThr GluIleProGlu LeulleLeu	-
601	CTATAGGCAA ATGGATTGCT GATAATCAGC CAAGGCTGAT TCAGTGTGAA AATGAGGTAG GGAAATTGTT GTTTATCACA GAAATAGCCAG AATTAATACT GATAICCGTT TACCTAACGA CTATTAGTCG GTTCCGACTA AGTCACACTT TTACTCCATC CCTTTAACAA CAAATAGTGT CTTTAGGGTC TTAATTATGA	
+3.	LeuGluAspPro SerGluAlaLys GluAsnLeu IleLeuGln GluThrSerVal IleGluSer LeuAlaAla AspGlySerPro GlyLeuLys SerValLeu	
701	GGAAGACCCC AGTGAAGCCA AAGAGAACCT CATTCTGCAA GAAACATCTG TGATAGAGTC GTTGGCTGCA GATGGGAGCC CAGGGCTAAA ATCAGTGCTA CCTTCTGGGG TCACTTCGGT TTCTCTTGGA GTAAGACGTT CTTTGTAGAC ACTATCTCAG CAACCGACGT CTACCCTCGG GTCCCGATTT TAGTCACGAT	

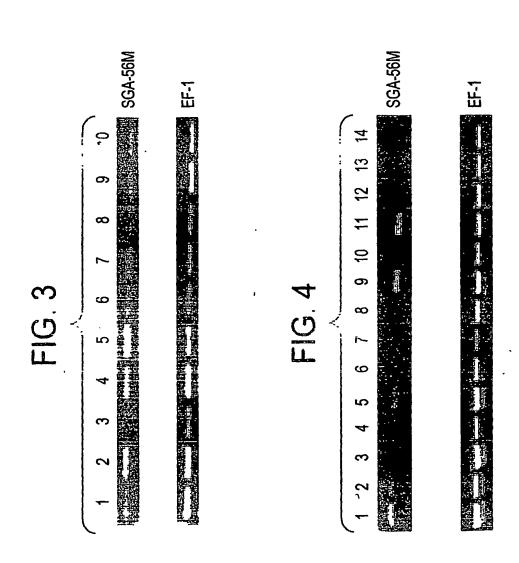
### FIG. 2F

## FIG. 20

roValMet	CTGTAAT	pAspSer	CTGGGATTCT	GluGlnAspPro	CAGGATC	LeuThrGlyPhe SerLeuAsn	CTCTCAA	aProGln	GGCCCCCCAG	SerAspHisSer ThrProAla SerGlnSer ProHisSerSer	CATTCCT	rgasparg	GGATAG
InPro P	AAC CTC TTG GAG	LysMetLys ProPhePro MetGluProTyr AsnHisAsn ProSerGlu ValLysValPro GluPheTyr TrpAspSer	CTA CTG GAT GAC	Pro Glu	GGCAAACGGI CACCAGGAGI CITCCGICCA GAGCAGGAIC CCGITTGCCA GIGGICCICA GAAGGCAGGI CICGICCIAG	lyPhe S	GCCCTCAGAG CTCATGTCAC ATTCATCCTC TTTCCTGTCC CTCACCGGAT TCTCTCTCAA CGGGAGTCTC GAGTACAGTG TAAGGAGAG AAAGGACAGG GAGTGGCCTA AGAGAGAGTT	TyrGlyLysAsn LeuThrSer SerSerLys AlaGluLeuSer ProSerMet AlaProGln	GCAGAACTCA GTCCCTCAAT GGCCCCCCAG CGTCTTGAGT CAGGGAGTTA CCGGGGGGTC	Ser Pro	ACTOCGIGGI CTCCATCACT TCCTGCCAGT TCAGATCATT CAACACCAGC CAGCCAGTCT CCTCATTCCT TGAGGCACCA GAGGTAGTGA AGGACGGTCA AGTCTAGTAA GTTGTGGTCG GTCGGTCAGA GGAGTAAGGA	<b>spAsn</b> A.	ATA ACA
SerLeuG	TCATTGC	o GluPh	CAGAATTCTA GTCTTAAGAT	PheArg	CTTCCGT	LeuThrG	CTCACCG	r Prose	GTCCCTCAAT	SerGln	CAGCCAG	ThrProd	ACTCCAG
GluPro	GAGCCG	ysValPr	GTCAAGGTCC	oGlyVal	AGGAGT	Leuser	CTGTCC	luLeuSe	GCAGAACTCA	rProAla	ACCAGC	Ilegly	ATTGGG
en Phe	T GTTT	u Vall	A GTCA T CAGT	Ser Pr	T CACC	er Phe	C TTTC	rs AlaG	A GCAG	Ser Th	T CAAC	ly Pro	S ACCC
IleLysI	TATAAAAC	ProserG]	CCTCAG	lyĿysArg	SCAPACGO	SerSer	rtcatcc:	serSerLy	AGCTCCA1	erAspHie	AGATCA)	AsnPhe(	AATTT
AspPro	AGACC CO	lisAsn }	ATGGAGCCAT ATAACCATAA TCCCTCAGAA TACCTCGGTA TATTGGTATT AGGGAGTCTT	rgArg G	SCAGG GC	SerHis	TCAC A	Thrser \$	TATGGGAAAA ACCTGACATC CAGCTCCAAA ATACCCTTTT TGGACTGTAG GTCGAGGTTT		CCAGT TO	PheSer	TTCT CC
Threli	ACCCA	yr Asn	ATAACC	e AspAı	AGACCC TCTGGC	LeuMet	CTCAT	ısıı Leuf	ACCTG	u ProA]	TCCTGC	. ValPro	GTTCC?
rrenglr	ACCTTCAG FGGAAGTC	GluProl	GAGCCAT	laAsnil	CAAACAT	coSerGlu	crcagae	GlyLys	GGGAAAA	ProSerLe	carcaci	lsAsnSer	TAATTCI
oTyr T	CTA CTZ GAT GAT	Pro Met	CCC ATC	lnGln 2	AAC AAC I'I'G I'I'C	uLys Pı	GAA GCC		STA TAT	rpser 1	GCA GAC	sAsn Hi	CAA CC
GlnPro	ACAGCC	ProPhe	GCCTTTTCCC	letAlaG	TGGCAC	LeuGl	TATTGGA	AsnGlu	CAATGAGGTA	hrProT	CTCCGT	ThrHi	PACACA
oValLys	TGTGA P	MetLys	ATGAA C	erval M	CTGTA P	sSerLeu	ATCCT T	SerMetPhe AsnGluVal		lugly 1	AAGGG P	rProPro	TCCTC
MetPr	ATGCC		AAAAA	ın ArgS	CAGAI	GluLy	GAGAA		ATAGI	u PheG	TTTT	SerSe	AGCTC
ylysile	GAAAAT	LeuGluI	CTAGAA	laaspas	CTGATA	tProPhe	GCCGTT	ProAsn	CCAAAT	.yrSerLe	ATTCCC	rLeuPro	CCTACC
Leu Gl	TT AGG	ln Pro	AG CCI TC GGA	rMet A	CA TGG	Arg Me	AG AAT TC TTA	rg Tyr	GA TAC	rbeu I	TC TGI	Ser Se	AG CAG
GlnGlyProLeu GlyLysile MetProValLys GlnProTyr TyrLeuGln ThrGlnAspPro IleLysLeu PheGluPro SerLeuGlnPro ProValMet	AAGGCCCATT AGGGAAAATT ATGCCTGTGA AACAGCCCTA CTACCTTCAG ACCCAAGACC CCATAAAACT GTTTGAGCCG TCATTGCAAC CTCCTGTAAT TTCCGGGTAA TCCCTITTAA TACGGACACT TTGTCGGGAT GATGGAAGTC TGGGTTCTGG GGTATTTTGA CAAACTCGGC AGTAACGTTG GAGGACATTA	$\bigcap_{C}$ +3 MetGlnGlnGln ProLeuGluLys	GCAGCAGCAG CCTCTAGAAA AAAAAATGAA GCCTTTTCCC ATGGAGCCAT ATAACCATAA TCCCTCAGAA GTCAAGGTCC CAGAATTCTA CTGGGATTCT CGTCGTCGTC GGAGATCTTT TTTTTTACTT CGGAAAAGGG TACCTCGGTA TATTGGTATT AGGGAGTCTT CAGTTCCAGG GTCTTAAGAT GACCCTAAGA	SerTyrSerMet AlaAspAsn ArgSerVal MetAlaGlnGln AlaAsnIle AspArgArg GlyLysArgSer ProGlyVal PheArgPro	TCCTACAGCA TGGCTGATAA CAGATCTGTA ATGGCACAAC AAGCAAACAT AGACCGCAGG GGCAAACGGT CACCAGGAGT AGGATGTCGT ACCGACTATT GTCTAGACAT TACCGTGTTG TTCGTTTGTA TCTGGCGTCC CCGTTTGCCA GTGGTCCTCA	ProValProArg MetProPhe GluLysSerLeu LeuGluLys ProSerGlu LeuMetSerHis SerSerSer PheLeuSer	CTGTACCCAG AATGCCGTTT GAGAAATCCT TATTGGAGAA GACATGGGTC TTACGGCAAA CTCTTTAGGA ATAACCTCTT	J = +3 AsnGlnGluArg TyrProAsnAsn	TCAGGAAAGA TACCCAAATA ATAGTATGTT AGTCCTTTCT ATGGGTTTAT TATCATACAA	GluThrSerLeu TyrSerLeu PheGluGly ThrProTrpSer ProSerLeu ProAlaSer	GAAACAICIC IGIAITICCCI ITITIGAAGGG CITIGIAGAG ACAIAAGGGA AAAACIICCC	SerAsnProSer SerLeuPro SerSerProPro ThrHisAsn HisAsnSer ValProPheSer AsnPheGly ProIleGly ThrProAspAsn ArgAspArg	CIAACCCAAG CAGCCIACCC AGCICICCIC CAACACACAA CCAIAAIICI GIICCAIICI CCAAIIIIGG ACCCAIIGG ACTCCAGAIA ACAGGGAIAG
+3	1501	ຼື SU	ອູ່ BSTI	Ţ TU	รู้ TE S	+3	독 (F	΅ RŪI	_Ë 26	ç 5) <sup>∓</sup>	2001	+3	2101

#### FIG. 2D

					8/13
+3 ArgArgThrAla AspArgTrpLys ThrAspLys ProAlaMet GlyGlyPheGly IleAspTyr LeuSerAla ThrSerSer GluSerSer TrpHisGln	2201 AAGGACTGCA GATCGGTGGA AAACTGATAA GCCAGCCATG GGTGGGTTTG GCATTGATTA TCTCTCAGCA ACGTCATCCT CTGAGAGCAG TTGGCATCAG TTCCTGACGT CTAGCCACCT TTTGACTATT CGGTCGGTAC CCACCCCAAAC CGTAACTAAT AGAGAGTCGT TGCAGTAGGA GACTCTCGTC AACCGTAGTC	ro SerGlyThr TrpThr	GCCAGCACTC CGAGTGGCAC CTGGACAGGC CATGGCCCTT CCATGGAGGA TT CGGTCGTGAG GCTCACCGTG GACCTGTCCG GTACCGGGAA GGTACCTCCT AA	ln LeuLeuMet G	TGATGCATCC TGGACCTTCT GCTCTGGAGC AGCTGTTAAT GCAGCAGAAG CAGAAACAGC A ACTACGTAGG ACTCTTGGAGC TCGACAATTA CGTCGTCTTC GTCTTTGTCG TAGATGCA TGTTGGGTTT GCAGGACTGG CTTCACCGTTG GACCCTTACT TCGAGGTAT TTGGTACCGT ACAACCCAAA CGTCCTGACC GTCGCTGCT AGAGGGTGT AAGTATTCCA CCAGCCGCT GAGTGCAC GAAATGTTCG CAGACGACAG TTCTCCCACA TTCATAAGGT GGTCGGGCGA CTCACACGTG CTTTACAAGC GCCCCGGGGC CTCCCGGGGC CTTCCGGAGG GAGAAGAGAGA GGAACTGCTG TTATCTCAC TCAGTTACTT GGGGGCCCCG GAAGGCCTCC CTCTCTCTCTCT CCTTGACGAC AAATAGAGT AGTCAATGAA CGGGGCCCCG GAAGGCCTCC CTCTCTCTCTCT CCTTGACGAC AAATAGAGT AGTCAATGAA C



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10/13

FIG. 5A

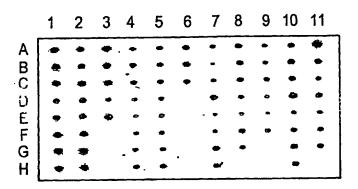
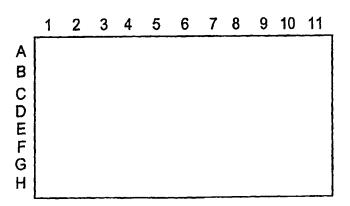
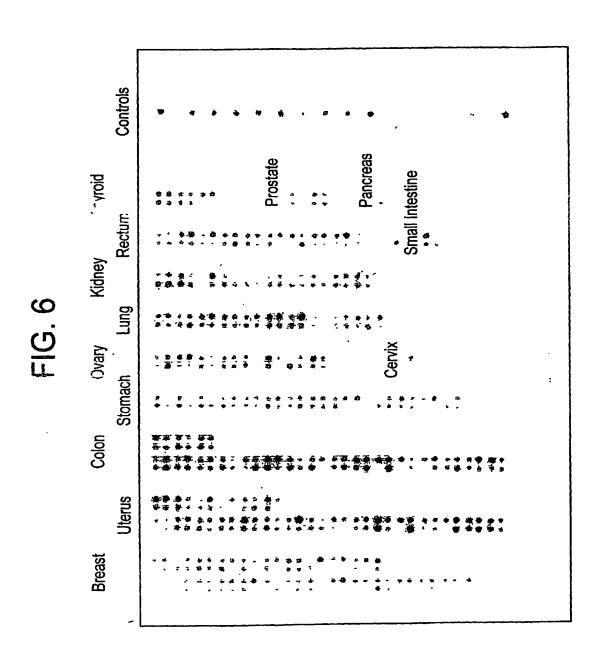


FIG. 5B



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12/13

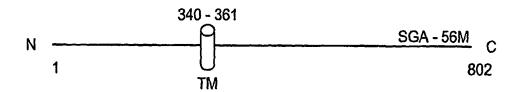
#### FIG. 7

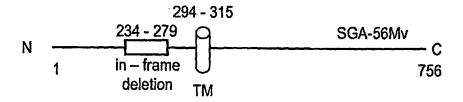
1	MSFLGILCKC	PLQNESQEES	YNAYPLPAVK	VSMDWLRLRP	RVFQEAVVDE
51	RQYIWPWLIS	LLNSFHPHEE	DLSSISATPL	PEEFELQGFL	ALRPSFRNLD
101	FSKGHQGITG	DKEGQQRRIR	QQRLISIGKW	IADNQPRLIQ	CENEVGKLLF
151	ITEIPELILE	DPSEAKENLI	LQETSVIESL	AADGSPGLKS	VLSTSRNLSN
201	NCDTGEKPVV	TFKENIKTRE	VNRDQGRSFP	PKEVRRDYSK	GITVTKNDGK
251	KDNNKRKTET	KKCTLEKLQE	TGKQNVAVQV	KSQTELRKTP	VSEARKTPVT
301	QTPTQASNSQ	FIPIHHPGAF	PPLPSRPGFP	PPTYVIPPPV	AFSMGSGYTF
351	PAGVSVPGTF	LQPTAHSPAG	NQVQAGKQSH	IPYSQQRPSG	PGPMNQGPQQ
401	SQPPSQQPLT	SLPAQPTAQS	TSQLQVQALT	QQQQSPTKAV	PALGKSPPHH
451	SGFQQYQQAD	ASKQLWNPPQ	VQGPLGKIMP	VKQPYYLQTQ	DPIKLFEPSL
501	QPPVMQQQPL	EKKMKPFPME	PYNHNPSEVK	VPEFYWDSSY	SMADNRSVMA
551	QQANIDRRGK	RSPGVFRPEQ	DPVPRMPFEK	SLLEKPSELM	SHSSSFLSLT
601	GFSLNQERYP	NNSMFNEVYG	KNLTSSSKAE	LSPSMAPQET	SLYSLFEGTP
651	WSPSLPASSD	HSTPASQSPH	SSNPSSLPSS	PPTHNHNSVP	FSNFGPIGTP
701	DNRDRRTADR	WKTDKPAMGG	FGIDYLSATS	SSESSWHQAS	TPSGTWTGHG
751	PSMEDSSAVL	MESLKSIWSS	SMMHPGPSAL	EQLLMQQKQK	QQRGQGTMNP
801	PH				

#### FIG. 8

l	MSFLGILCKC	PLQNESQEES	YNAYPLPAVK	VSMDWLRLRP	RVFQEAVVDE
51	RQYIWPWLIS	LLNSFHPHEE	DLSSISATPL	PEEFELQGFL	ALRPSFRNLD
101	FSKGHQGITG	DKEGQQRRIR	QQRLISIGKW	IADNQPRLIQ	CENEVGKLLF
151	ITEIPELILE	DPSEAKENLI	LQETSVIESL	AADGSPGLKS	VLSTSRNLSN
201	NCDTGEKPVV	TFKENIKTRE	VNRDQGRSFP	PKEVKSQTGL	RKTPVSEARK
251	TPVTQTPTQA	SNSQFIPIHH	PGAFPPLPSR	PGFPPPTYVI	PPPVAFSMGS
301	GYTFPAGVSV	PGTFLQPTAH	SPAGNQVQAG	KQSHIPYSQQ	RPSGPGPMNQ
351	GPQQSQPPSQ	QPLTSLPAQP	TAQSTSQLQV	QALTQQQQSP	TKAVPALGKS
401	PPHHSGFQQY	QQADASKQLW	NPPQVQGPLG	KIMPVKQPYY	LQTQDPIKLF
451	EPSLQPPVMQ	QQPLEKKMKP	FPMEPYNHNP	SEVKVPEFYW	DSSYSMADNR
501	SVMAQQANID	RRGKRSPGVF	RPEQDPVPRM	PFEKSLLEKP	SELMSHSSSF
551	LSLTGFSLNQ	ERYPNNSMFN	EVYGKNLTSS	SKAELSPSMA	PQETSLYSLF
601	EGTPWSPSLP	ASSDHSTPAS	QSPHSSNPSS	LPSSPPTHNH	NSVPFSNFGP
651	IGTPDNRDRR	TADRWKTDKP	AMGGFGIDYL	SATSSSESSW	HQASTPSGTW
701	TGHGPSMEDS	SAVLMESLKS	IWSSSMMHPG	PSALEQLLMQ	QKQKQQRGQG
751	TMNPPH				

FIG. 9





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